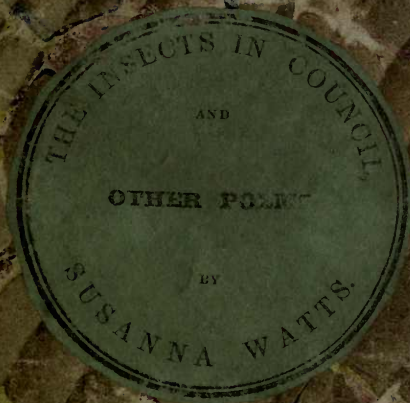


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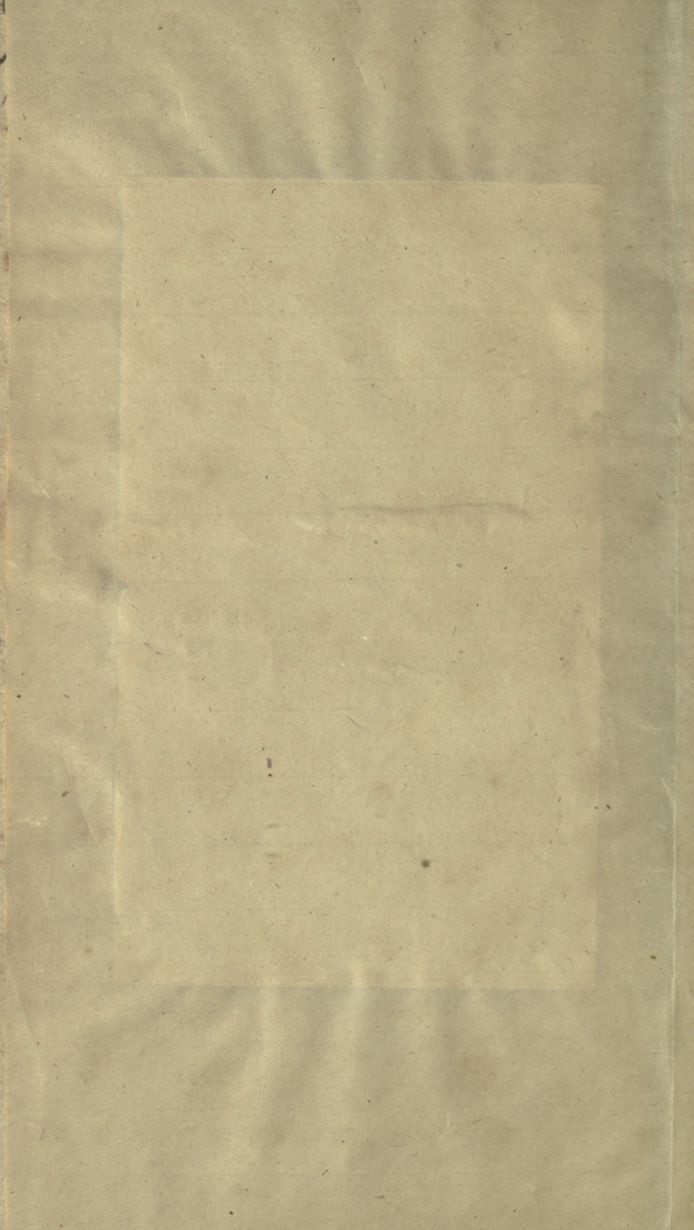
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THE

INSECTS IN COUNCIL,

ADDRESSED TO ENTOMOLOGISTS

AND

OTHER POEMS,

BY SUSANNA WATTS.



"To write that"

"All need to know, and all heart to set;

"The common, and inspiring, as the rare"

"With fervent eloquence, unobtrusive and bold."

THOMAS & LEIGHTON.

LONDON:

WHEAT, CHANCE, & CO., ST. PAUL'S CHURCH-YARD,

AND

A. DICKSHAW, LEICESTER.

1838.

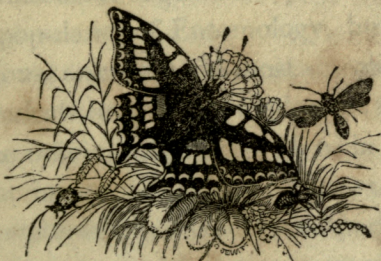
THE
INSECTS IN COUNCIL,

ADDRESSED TO ENTOMOLOGISTS,

WITH

OTHER POEMS,

BY SUSANNA WATTS.



" In senate met ;
" All head to counsel, and all heart to act ;
" The common weal inspiring ev'ry tongue
" With fervent eloquence, unbrib'd and bold."

THOMSON'S LIBERTY.

LONDON :

HURST, CHANCE, & CO., ST. PAUL'S CHURCH-YARD,
AND
A. COCKSHAW, LEICESTER.

1828.

THE

SECTS IN COUNCIL

ADDRESSED TO THE

OTHER

BY STANLEY WATTS



ALL BORN IN VAIN, AND ALL BORN TO DIE.
THE FUTURE OF THE NATION IS AT STAKE.
WITH THESE AND OTHER IMPORTANT QUESTIONS.
AND A COMPLETE HISTORY OF THE

LONDON:

CLARKE & CO. ST. PAUL'S CHURCH-YARD.

A COMPLETE HISTORY OF THE

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P R E F A C E.

THE following little Fable is not presented to the Public as a mere bagatelle of amusement suggested by the fashionable popularity of Entomology, but under a serious, anxious, and most sincere desire to inculcate respect and tenderness towards all the inferior creatures. Men, in theory, (if not in practice,) have fully explained and established a beautiful and perfect system of their social duties towards each other;—but they have never thought of admitting into their code as *a principle*, their own duty towards the animals. *Here* the relation is not acknowledged of *master* and *servant*;—it is *owner* and *slave*;—absolute power and absolute subjection. That great pattern of legal uprightness and christian excellence, Sir Matthew Hale, in his striking tract, called

“The Great Audit,” represents the Supreme Judge as demanding, among the particular charges for which he calls his servants to judgment, an account of their conduct towards the creatures over which he gave them dominion. The *faithful steward* replies.—“I have ever thought that there was a certain degree of justice due from man to the creatures as from man to man; and that an excessive, immoderate, unseasonable use of the creatures’ labor is an injustice for which he must account, therefore I have always esteemed it a part of my duty, and it hath always been my practice to be merciful to beasts; and upon the same account I have ever esteemed it a breach of trust, and have accordingly declined *any cruelty to any of thy creatures, as a tyranny inconsistent with the trust and stewardship that thou hast committed to me.* I have abhorred those sports which consist in the torturing of the creatures.—And I have still thought it an unlawful thing to destroy those creatures for recreation’s

sake, that either were not hurtful when they lived, nor profitable when they are killed ; ever remembering that thou hast given us a dominion over thy creatures ; yet it is under a law of justice, prudence, and moderation, otherwise we should become *tyrants*, not *lords* over thy creatures ; and therefore, those things that others have practised as *recreations*, I have avoided as *sins*.”—

If then, such is the rational and obligatory relation between man and the larger animals, ought not the same feelings to be exercised towards insects. These beautiful and highly-endowed creatures, owing to their minuteness, are overlooked and considered as proverbially insignificant, yet they are a world in themselves, a microcosm of miracles, exhibiting in their structure, habits, and instincts, as equally astonishing proofs of omnipotence, contrivance and goodness, as those animal tribes whose powers and endowments are broad and visible to every eye. The adaptation of the camel to his sandy

desert, and of the rein-deer to his snowy regions, is not more wonderful than that of the spider and the fly to their destined office and habitation.

As insects are peculiarly attractive to children, either as objects of delight, or as playthings to be sported with, hurt, or killed, it is no small duty of education to inculcate tenderness towards them. If I mistake not, Hogarth, in his admirable *Progress of Cruelty*, traces its stages from the boy who tortured flies, to the murderer whose heart he represents as gnawn by a dog in the dissecting room of the surgeon.

If a child be properly impressed with some knowledge of the wonderful structure and ingenious labours of insects, he will not venture to destroy one of these specimens of divine art. The beautifully illustrative precept of the amiable and pious Jeremy Taylor ought to be engraven, not only on the hearts of children, but on those of every human being. “**GOD** is in every creature: be

cruel towards none. Remember that every creature is one of the *lesser cabinets and receptacles* of GOD.”

The author would rejoice, with every friend to humanity, to see the cause of the animals advocated by some first-rate poet, some magnanimous senator, or some able preacher. The subject is worthy of talents the most exalted ; and that man of genius would deserve the thanks of his country, who should free her from the reproach and pollution of a vice so degrading, unmanly, and anti-christian, as *cruelty towards animals*.

The present fashionable mode of making collections of insects, it is to be feared, may blunt that delicate sense of humanity which shrinks at taking away life. The feeling and good sense of the humane will therefore view with candor any attempt, however small, to cherish sentiments which are undoubtedly connected with the christian law of universal kindness ; for that mind which is accustomed to contemplate with delight the

happy frolics of a butterfly, will be in a temper to sympathise in the pleasures and pains of his fellow-creatures. In every point of view, humanity towards every thing that is blest with existence, is of high importance. As an attribute of *moral taste*, it points, refines, and polishes the sensibilities of the mind, and renders it more alive to the influence of all that is beautiful and attractive in creation or art. As a serious consideration in *political economy*, it bears an importance of inexpressible weight; for if the morals of a nation be indispensibly connected with its weal or its woe, the prevalence of humanity in the general mind must tend to prevent those diabolical acts of outrage and murder which so deeply stain the public annals of this period. To carry the analogy to a still higher point, which, though it ascends towards heaven, is not an assumed but a demonstrable point, the principle in question is inseparably connected with *religion*. Tenderness and kindness *habitually* exercised towards *every being* which feels and

enjoys its existence, must deserve to be called a part of that affectionate temper of mind, that sweetness of universal benevolence, which softens, exalts, and regulates the human heart, and by the power of Divine influence, endues it with those *heavenly* dispositions, to which the promise of *heaven* is annexed.

And whither, shall we tremblingly ask, does *cruelty* lead the human soul?—From the torturing of animals, to that tremendous point of inhumanity, a relish and delight in spectacles of blood—thence down the fearful declivity, to the perpetration of the most deliberate murder:—and farther onward—where christian charity dares not cast a look.—

“The general prevalence of this *malignant moral distemper*, (says a writer* equally energetic and benevolent) calls loudly for some more effective remedy than has ever yet been administered: for though the present age may abound in the

* “Cursory Remarks on unrestrained Cruelty.”—*Harvey and Darton*, 1823.

number and variety of its plans of reform, it seems strangely to have overlooked, or rather to have connived at, practices which most effectually neutralize and counteract such designs, and which have the most degrading and brutalising tendency. What can be more disgraceful—more directly opposed to the established religion of the country—more destructive of good morals and good manners—than the toleration allowed to pugilistic combats? which not only harden and deprave the spectators, but by their minute and horrid descriptions in the public journals, vitiate the public taste, and sicken and distress all who are not corrupted by such disgusting details.” I am tempted to remind the reader of the conclusion of this animated pamphlet.

“ These cursory observations on the barbarities exercised in Smithfield market, and on other allowed practices of cruelty will, it is hoped, have some tendency to awaken a more general attention to the subject; to convince the christian philanthropist that no propensity in human na-

ture is more directly hostile to the well-being and good order of society—to the best concerted plans for its moral improvement—to every principle of religion and justice,—than cruelty:—that none calls for severer restrictions;—and that the authority of the magistrate cannot be more beneficially exercised than in taking the most effective measures for the discouragement and suppression of this most odious and flagitious propensity.”—

These *serious* remarks prefixed to the following *Fable*, may appear like a solemn prelude to a lively air, or a grave judge introducing a group of fantoccini. But, *ami lecteur*, whoever you be, I beg you to bear in mind that in this little cento of prose and rhyme, the *earnest* is most *sincere*, and the *playful* most *earnest*. And should you laugh at the attempt to sally forth for the rescue of *oppressed Insects*, recollect that Virgil himself has immortalised the *Gnat* which was slain by the shepherd, whose life it had benevolently sought to save by awakening him

when approached by a serpent ; and that Spenser tuned his harp to a mournful elegy on the unfortunate death of *Clarion* the *Butterfly*. Surely that chivalrous knight who shall *achieve* an adventure so difficult as that of reinstating the states of the insect world, in all their lawful rights, privileges and securities, will deserve a laurel wreath, as well as either the Mantuan Bard, or the Father of English Poetry. — And if the enterprise could be extended to the deliverance of all the animal tribes of Beasts, Birds, and Fishes, a *civic crown* were not too high a reward for such *public service*.

To deprecate criticism were equally unnecessary and useless ;—*Qui s'excuse s'accuse*. If an apology were due for publishing a trifle, it ought not to have been published. The high courts of literary judicature this *Insect book* can never be allowed to enter ; but should it venturously perch upon a critic's head, it has nothing to fear.—

“ Who breaks a BUTTERFLY upon the wheel ? ”

THE

INSECTS IN COUNCIL,

A FABLE.

THRO' all the vast nations, that creep, float or fly,
In the boundless domains of earth, water, and
sky,

The terrors of war spread distress and alarms,
For the BIPEDS, for conquest, were all under
arms.

Not a nook of a bank—not a chink of a tree,
From these daily and nightly invaders was free;
In habit of sportsman, with net, bag, and knife;—
With poison and pins for destruction of life,
And portable prisons, in which to ensnare
The captives they seize in the water or air;—

They come forth by day,—then in gloom of the
eve,

With nets all illumin'd, steal out to deceive ;
An art, to which modern invention's no stranger,
By *light artificial* to lure into danger ;
For men are like moths, and will heedlessly run,
To the glare of a taper and think it the sun.

In emergence thus dire, each confederate
state,

Agreed on a council for solemn debate.

The HUMMING-BIRD SPHINX on her soft-
sounding wings,

Like notes that sweep sweet o'er Eolian strings,
Was despatch'd to convene from their airy do-
minions,

The nations innumerable that float upon pinions.

The GRASSHOPPER—sacred to music of yore,
Whom the fam'd Grecian poets profess'd to adore,
And plac'd on the harp as an emblem renown'd,
Of the science that teaches the knowledge of
sound ;

And now, as distinguish'd for fleetness and
mirth,
Invited the states that inhabit the earth.
The GNAT, o'er the stream that so lightly can
dart,
And in buzzing incessant so well play his part,
Was deputed the nations aquatic to wake,
That dwell in the regions of stream, fen, or lake.

The place of assembly was chosen with care,
As far as might be, from observance or snare ;
In the heart of a forest, where open'd the shade,
Disclosing to daylight a sunshiny glade ;
Young saplings around spread their tenderest
green,
The lords of the wood overtopping the scene ;
The bay of a brook, with its mirror of glass,
Stealing in thro' the bushes, enlighten'd the
grass.
Boast monarchs and statesmen, or all of their
race,
A chamber of council adorn'd with such grace ?

In crowds to the spot all the nations repair,
And, save the small Midge, every insect was
there ;

He, (happy distinction ! which greatness ne'er
knows,)

Alike was unheeded by friends or by foes.

The *Butterfly* tribe first advanc'd thro' the
air,

PURPLE EMPEROR led them in splendor most
rare ;

A race blest by nature with privilege high,
To burst from the tomb and ascend to the sky.^A
Here came the gay PEACOCK with eyes on his
back,

And rich ATALANTA, in crimson and black,
Light GAMMA, adorn'd with his elegant crest,
A Grecian inscription design'd on his vest,
And lovely VANESSA, so meek and serene,
Array'd like spring leaves, in a robe of pale
green ;

Beside her, (a contrast that oft strikes the sight),

Came the gay PAINTED LADY, in orange all
bright.

In robes green and sable came PRIAM, grave sire,
With ADONIS the beau, in his azure attire—

And SWALLOW-TAIL graceful and ample of wing,
In yellow, imperial, like China's great king.

The lovely assemblage, in colors so bright,
Red, orange, and purple, blue, yellow, and white,
O'erspread all the trees, and, enchanting to view,
Mingled soft with the verdure each delicate hue;
While fine pencil'd lines their gay plumage be-
deck,

In graceful design of streak, atom, or speck ;
The motion of life and the richness of bloom
United, a wond'rous appearance assume,
As if, by the touch of some magical pow'rs,
The thicket was peopled with animate flow'rs.

Next, light as the ether, and almost as rare,
The GNATS and EPHEMERA dance thro' the air ;
Now riding on sunbeams, half-melting in light,
Now rapid as lightning, escaping from sight ;

Interweaving gay movements in intricate play,
And enjoying with rapture their life of a day.—

Next arriv'd the light tribes, who so buoy-
ant of limb—

Can walk on the water, can dive, or can swim;
And, foremost in rank, from his crystal retreat,
NOTO-NECTA, the Admiral, led on his fleet.

And lastly, the tribes of the earth o'er the
lawn,

In ample and beauteous arrangement were drawn;
Here came DI'MOND BEETLE, so splendidly
gay,

Like a Sultan of Ind, in his jewel'd array;
And with him a train all refulgent he brings,
In targets that close o'er their nice-folded wings,
Where colors of metals resplendent are set,
The burnish of gold and the polish of jet,—
The emerald's rich green and the amethyst bright,
Intermingling their hues with the changes of
light.

It seem'd, that forsaking the caves of their birth,
The gems of the mines were emerging to earth.

Loud humming and buzzing now shook
ev'ry leaf
With mingled emotions of terror and grief;—
The tribes, which by Nature's kind hand were
prepar'd
With weapons offensive, for battle declar'd.—
When forth came the DRAGON-FLY, bright to
behold,
In his mantle all checquer'd with black, green,
and gold;
And wheeling in air on his gossamer wings,
Like a knight, who careers ere to combat he
springs,
With his keen spacious eyes the assembly sur-
vey'd,
And thus his oration indignantly made.—

“Free tribes of the earth! here conven'd in
debate,

“Not small in renown and in multitude great !

“’Twere right in a cause so momentous as ours,

“To estimate fairly our merits and pow’rs ;

“And poise in just balance (for surely we can)

“The *instinct* of Insects—the *reason* of Man.^B

“That attribute boasted by him as so strong,

“Directs him to actions now right and now
wrong ;

“Nay, often his logic bewilders him quite,

“And he fights to maintain that the *black* is the
white !

“But we, by a wonderful effort of skill,

“Are endow’d with such perfect obedience of
will,

“That since the first day when our being began,

“And in Eden we all were presented to man,

“Our instinct, ordain’d for the guide of our way,

“Was never yet known to conduct us astray ;

“Our talents, our manners, our habits produce

“Unerring effects for our comfort and use.

“Then shew the superior gifts you inherit,

“And stand forth, demonstrated, Insects of merit !

“In such an assembly, ’twere vain to re-
trace

“The injuries suffer’d, too long, by our race ;

“And if we endure them and tamely submit,

“We are either deficient in *courage* or *wit* !

“With regard to our intellect, prove it we can,

“We possess a large portion as well as king

MAN :

“He boasts of inventions as newly devin’d,

“Which to us were familiar from time out of
mind !

“Friend GNAT !—’tis well known that, your
offspring to save,

“You invented the life-boat to float on the wave ;^c

“And the SPIDERS, who love an aerial station,

“Have used air-balloons ever since the creation.^d

“While Man, slow in arts, fram’d his dwelling
of mud,

“With a bundle of straw, and rough rafters of
wood ;

“The architect ANT, noble cities outlaid,^e

“With street geometric, and long colonnade !—

“With regard to inventions, which moderns
assume,

“Of wonderful pow’rs in the arts of the loom ;

“Our weaver, the SILKWORM, e’er since the
beginning,^F

“Has shewn far superior machin’ry in spin-
ning.

“To pomp, fashion, commerce, what wonderful
boons

“She confers on mankind by her precious
cocoons !

“For, like the fam’d goose, in the fable of old,

“The eggs that she lays are indeed *eggs of gold* !

“Then as to our trades, we can show, if you
will,

“Mechanics, whose industry rivals their skill ;

“We have *Carpenters, Tailors, and Grave-diggers*
too,

“And sempstresses neat, who can cleverly sew.

“Cousin BEE ! I shall give you no more than
your due,

“If I say Man is no better *builder* than you !

“And for *chemical* skill, all his genius and
money

“Have not yet instructed him how to make
honey!

“Then as to the point of *political science*,

“’Tis very well *known*, you may bid *him* defiance,

“Let him traverse his earth, and he cannot
produce

“A state, like your hive, for art, labour, and use.

“Friend EMMET, renown’d mid the labouring
kind,

“I beg you will not undervalue *your mind*;

“You are very sagacious, and though it is said,

“You imitate man in a certain base trade,^g

“Making slaves of your Negroes—in that you’re
his debtor,

“*He* gives the example—you ought to know
better!

“Come, free all your slaves, and deserve our
applause,

“And nobly unite in our patriot cause!

“Come then, my brave friends ! let us view
our resources,

“Examine our arms, and arrange all our forces.

“Prepare for defence ! we have weapons in store,

“That our tyrant at length may be brought to
deplore.—

“We have lances and darts of a temper so fine,^H

“As mere human artists must fail to design.

“—Sir HORNET ! you’re arm’d, like the heroes
of old,

“With a lance of keen point—and I know you
are bold.

“STAG BEETLE ! your antlers, though small
be their span,

“May very soon cripple the fingers of Man !

“Cousin WASP !—for light archers, we fix upon
you,

“For *your* poison’d arrows much mischief may
do.

“And as to myself, you will own, without doubt,

“I shall make for our army an excellent scout !^I

“Still ready to fly, at the slightest alarms,
“A centinel faithful, who sleeps on his arms.

“Behold ! what vast forces !—unite, Insect
pow’rs,
“Fight, steady and dauntless—and vict’ry is
ours !”

The orator ceas’d—and from myriads of
wings,
The tribes who had *not*, and the tribes who *had*
stings,
Re-echo’d applause in continuous roar,
Like the winds on the forest or waves on the
shore ;
When, foremost the valiant suggestion to seize,
In dignified grace, rose the *QUEEN of the Bees*.
Aloft on an elm stood her majesty sweet,
With her subjects obedient in swarms at her feet.
In a moment, with chivalrous homage profound,
Each pinion is folded, and hush’d ev’ry sound ;

All tribes and all parties unanimous own,
Such honor is due to the *feminine Throne*.

Her thanks with a grace, the fair sov'reign
express'd,

And thus, in firm tone, the assembly address'd.

“ Most honor'd Allies !—*I* shall firmly unite

“ In the plan thus propos'd in defence of our
right.

“ We here are assembled, confed'rate in zeal,

“ To consult and to act for the general weal ;

“ And, added to wrongs that have troubled of
late

“ The welfare and peace of each separate state,

“ *My* nation of old from the proud human race,

“ Has suffer'd oppression most cruel and base !

“ 'Tis very well known, that since time first
began,

“ My subjects all toil for the lux'ry of man ;

“ Collect and condense all the essences fine,

“ His table to grace with confections and wine—

“They labor all summer—when, savagely rude,
“In winter he slays them to feast on their food !
“Too long have I witness’d, with terror and pain,
“My citadels storm’d, and my children all slain !

“’Tis time that I rouse me, such subjects
to save,

“So faithful, industrious, skilful, and brave !—

“For never, since Man from *his* duty first fell,

“Have *my* loyal people been known to rebel.

“They shew to mankind an example most
strange—

“A well-order’d government, never to change !

“Thus deeply impress’d by their virtues and
wrongs,

“I feel that redress to their sov’reign belongs ;

“And happy to execute duty so high,

“I’ll lead them to combat—avenge them—or
die !”

She spake—and stood ready to marshal her train,
Like her brave sister sov’reign on Tilbury’s plain.

Here plaudits redoubled reverb'rate around,
And the circuit of air seems a chaos of sound ;
Wasps, Hornets, and Bees, war and victory
 breath'd,
Each trunk was extended—each sting was un-
 sheath'd.

In this critical space, like a counsellor, sage,
Uniting to valor the caution of age,
Who thinks ere he speaks, and who speaks
 what he thinks,
Grave, manly, and calm, rose the ATROPOS
 SPHINX,
In rich velvet vesture of orange and brown,
And, emblem of wisdom, a skull on his crown ;
His station he took on the leaf of an oak,
And thus with deliberate eloquence spoke.

“Permit me, my friends, ere you rashly
 engage,
“’Gainst Man’s mighty forces fierce combat to
 wage,

“With deference and friendly advice, if I can,
“To propose a more prudent and dignified plan.
“—I honor that zeal, which so fearless I see,
“In the valiant Sir Dragon and heroine Bee,
“’Tis a true British feeling, thus bravely to fight,
“In defence of our offspring, our friends, and
 our right.
“For though, from my conscience, I battle
 oppose,
“Yet deeply I mourn the extent of our woes.
“Yes, friends!—be assur’d that I feel with keen
 pain,
“The myriads of victims thus tortur’d and slain;
“And think not your counsellor tremblingly
 shrinks,
 (“No—far be such shame from a true-hearted
 sphinx !)
“From danger or death—but a way I’ll devise,
“More just, constitutional, worthy, and wise,
“To save all our nations,—and this is my plan,
“That instead of *resisting*, we *reason* with
 Man,

“Explaining our wrongs and our rights with
submission ;—

“ I therefore propose—that we *send a petition.*”—

He spake—and the tribes of the butterfly
kind,

To virtues pacific and gentle inclin’d,
Supported their leader with loud acclamations,
But murmurs were heard from the warrior
nations.

At length, by majority, able and true,
The motion was carried with victory due ;
The Petition was voted—applauses were warm,
And counsellor ATROPOS drew up the form ;
PRAYING MANTIS was call’d, who by nature
was meant

A suppliant gentle, the same to present,
And in posture persuasive, with grace all his own,
To lay it in form at the *foot of the throne.*

The Petition.

*To His Majesty MAN, lawful Sov'reign, by birth,
Of all Beasts, Birds, Fish, Insects, that dwell on
the earth ;*

*In whom, with their trust, their allegiance unites,—
PROTECTOR in chief of lives, properties, rights,
The nations of INSECTS, convok'd in debate,
In humble petition, respectfully state—*

That your Majesty's subjects, for time out
of mind,
Have liv'd midst the blessings by HEAVEN
design'd ;
Whose wisdom and goodness, which shine forth
the same,
In *our* structure minute, and *your* wonderful
frame,
To *life* gave enjoyment, a general dower,
From *your* throne in the world, to *our* house in
a flower.

In the rapture of freedom, we glanc'd 'mid the
bow'rs,

And sipp'd, without danger, the nectar of flow'rs;
Then curl'd our proboscis, and slept on a leaf,
Nor dreamt of awaking to slav'ry and grief!—
Unmolested we liv'd, except now and then chas'd
And enbalm'd to adorn some museum of taste;
Or inclos'd in the hat of the mischievous boy,
Who sees in a Butterfly only a toy.

But times are all alter'd.—Permit us to state
In your Majesty's ear, a reverse in our fate!—
For *now*—if fatigued with our frolics, we close
Our pinions to rest on the lap of a rose,
The Fowler's keen eye spreads his muslin de-
vice,

And the terrible clappers are clos'd in a trice!
Then closely confin'd, in the box or the glass,
How sick'ning!—how ling'ring the moments we
pass!

Some captives, impatient for freedom and air,
Beat the walls of their prison in restless despair;

Some motionless wait till death's pang shall
begin

In the dread boiling water or poisonous pin !

Should we suffer for science—to teach *you* to
find,¹

In the works of Creation the governing MIND ;
To admire how omnipotent skill could condense
In our form of a *point, beauty, usefulness, sense ;*
Should we suffer to lead you to knowledge so
high,

We should deem it our duty in silence to die.

By *Charter Divine* we are subject to you,

And if we can *serve* you, our *life* is your due ;

But should *that* be claim'd on a *lawful* pretence,

To take it by torture is, sure, an offence.

Your SOV'REIGN SUPREME who that charter
has lent,

Annex'd to the bounty no right to torment.

Of late has arisen, our race to o'erwhelm,
A practice that fashion has spread through the
realm,

A species of slave-trade!—New merchants arise,
In this kingdom of commerce, who traffic in

Flies;

And send out their agents abroad and at home,
For cargoes of Insects, industrious to roam,
Put quite out of question our rank in creation,
And make us mere objects of base speculation.

Among all the tribes that acknowledge your
right,

From Giant Rhinoceros down to the Mite,
Say, have you a colony, 'mid all your pow'rs
Upheld and supported so cheaply as ours?
Independent and frugal, ourselves we maintain,
Nor tax your Exchequer—no, not for a grain.

We steal not *your* honey, you first have your due,
For our friends of the Hive labour solely for *you*.
For invisible food, we industriously roam,
And the curl of a leaf is our shelter and home;
Your store-house of viands, your treasuries of
grain,

And all the vast wealth of your boundless domain,

To us no vain thirst of ambition can give—
We crave but one favor—*permission to live!*
And we feel you will grant a petition so just,
(Your Majesty's *character* warrants the trust,)
For fame has describ'd you possessing a mind,
Enlighten'd, benevolent, lib'ral, and kind.—

That your reign may be blest, and your
subjects true, all,
From the fly on your hand to the horse in your
stall ;
While with gen'rous protection their rights you
defend,
Not merely their sov'reign—their *father*, their
friend ;
Enjoying that godlike delight in your breast,
Of loving your subjects and seeing them blest ;
Supplying their wants, and their inj'ries re-
dressing,
And using your pow'r for the *purpose of bless-*
ing.

And that JUSTICE and MERCY may govern your
 sway,

We, your dutiful subjects, shall faithfully pray,
 &c. &c.

Signed—

For the nation of Lepidoptera——ATROPOS
 SPHINX.—*Death's-Head Moth.*

————— Neuroptera——LIBELLULA
 ————*Dragon-Fly.*

————— Coleoptera——LUCANUS
 CERVUS.—*Stag-Beetle.*

————— Hymenoptera——APIS.—*Bee.*
 &c. &c. &c.

May 1st, 1828.

NOTES.

A “ *A race blest by Nature with privilege high,
“ To burst from the tomb and ascend to the sky.”*

The Abbe de la Pluche calls the butterflies, “des ressuscités du peuple chenille, mais des ressuscités à qui l’on n’a pas accordé l’immortalité avec la nouvelle vie.” (Spectacle de la Nature.)

“ Were a naturalist to announce to the world the discovery of an animal which, for the first five years of its life, existed in the form of a serpent; which then penetrating into the earth, and weaving a shroud of pure silk of the finest texture, contracted itself within this covering into a body without external mouth or limbs, and resembling more than any thing else, an Egyptian mummy; and which, lastly, after remaining in this state without food or motion for three years longer, should, at the end of that period, burst its silken cerements, struggle through its earthy covering, and start into day a winged bird,—what, think you, would be the sensation excited by this

strange piece of intelligence ? After the first doubts of its truth were dispelled, what astonishment would succeed ! Amongst the learned what surmises ! what investigations ! Amongst the vulgar, what eager curiosity and amazement ! All would be interested in the history of such an unheard-of phenomenon ; even the most torpid would flock to the sight of such a prodigy.

But you ask, “ to what do all these improbable suppositions tend ? ” Simply to rouse your attention to the metamorphoses of the insect world, almost as strange and surprising, to which I am now about to direct your view,—miracles, which, though scarcely surpassed in singularity by all that poets have feigned, and though actually wrought every day beneath our eyes, are, because of their commonness and the minuteness of the objects, unheeded alike by the ignorant and the learned.

That butterfly, which amuses you with its aerial excursions, one while extracting nectar from the tube of the honeysuckle, and then, the very image of fickleness, flying to a rose, as if to contrast the hue of its wings with that of the flower on which it reposes—did not come into the world as you now behold it. At its first exclusion from the egg, and for some months afterwards, it was a worm-like caterpillar, crawling upon sixteen short legs, greedily devouring leaves with two jaws, and seeing by the means of

twelve eyes, so minute as to be nearly imperceptible without the aid of a microscope. You now view it furnished with wings capable of rapid and extensive flights: of its sixteen feet ten have disappeared, and the remaining six are in most respects wholly unlike those to which they have succeeded; its jaws have vanished, and are replaced by a curled-up proboscis, suited only for sipping liquid sweets; the form of its head is entirely changed,—two long horns project from its upper surface; and, instead of twelve invisible eyes, you behold two, very large, and composed of at least twenty thousand convex lenses, each supposed to be a distinct and effective eye!

Were you to push your examination further, and by dissection to compare the internal conformation of the caterpillar with that of the butterfly, you would witness changes even more extraordinary. In the former you would find some thousands of muscles, which in the latter are replaced by others of a form and structure entirely different. Nearly the whole body of the caterpillar is occupied by a capacious stomach. In the butterfly this has become converted into an almost imperceptible thread-like viscus; and the abdomen is now filled by two large packets of eggs, or other organs not visible in the first state. In the former, two spirally-convoluted tubes were filled with a silky gum; in the latter, both tubes and silk have almost totally vanished: and changes

equally great have taken place in the economy and structure of the nerves and other organs.

What a surprising transformation ! Nor was this all. The change from one form to another was not direct. An intermediate state not less singular intervened. After casting its skin even to its very jaws, several times, and attaining its full growth, the caterpillar attached itself to a leaf by a silken girth. Its body greatly contracted, its skin once more split asunder, and disclosed an oviform mass, without exterior mouth, eyes, or limbs, and exhibiting no other symptom of life than a slight motion when touched. In this state of death-like torpor, and without tasting food, the insect existed several months, until at length the tomb burst, and out of a case not more than an inch long, and a quarter of an inch in diameter, proceeded the butterfly before you, which covers a surface of nearly four inches square.

Almost every insect which you see has undergone a transformation as singular and surprising, though varied in many of its circumstances. That active little fly, now an unbidden guest at your table, whose delicate palate selects your choicest viands, one while extending his proboscis to the margin of a drop of wine, and then gaily flying to take a more solid repast from a pear or a peach ; now gamboling with his comrades in the air, now gracefully currying his furred wings with his taper feet,—was, but the other day, a

disgusting grub, without wings, without legs, without eyes, wallowing well pleased, in the midst of a mass of excrement.

The “*grey-coated gnat*,” whose humming salutation, while she makes her airy circles about your bed, gives terrific warning of the sanguinary operation in which she is ready to engage, was, a few hours ago, the inhabitant of a stagnant pool, more in shape like a fish than an insect. Then to have been taken out of the water, would have been speedily fatal ; now it could as little exist in any other element than air. Then it breathed through its tail, now through openings in its sides. Its shapeless head, in that period of its existence, is now exchanged for one adorned with elegantly tufted antennæ, and furnished, instead of jaws, with an apparatus more artfully constructed than the cupping glasses of the phlebotomist—an apparatus which, at the same time that it strikes in the lancets, composes a tube for pumping up the flowing blood.

The “*shard-born beetle*,” whose “sullen horn,” as he directs his “droning flight” close past your ears in your evening walk, calling up in poetic association the lines in which he has been alluded to by Shakspeare, Collins, and Gray, was not in his infancy an inhabitant of air ; the first period of his life being spent in gloomy solitude, as a grub, under the surface of the earth.—The shapeless maggot, which you scarcely fail to meet with in some one of every handful of nuts

you crack, would not always have grovelled in that humble state. If your unlucky intrusion upon its vaulted dwelling had not left it to perish in the wide world, it would have continued to reside there until its full growth had been attained. Then it would have gnawed itself an opening, and having entered the earth, and passed a few months in a state of inaction, would at length have emerged an elegant beetle, furnished with a slender and very long ebony beak, two wings, and two wing-cases ornamented with yellow bands, six feet, and in every respect unlike the worm from which it proceeded.

That bee—but it is needless to multiply instances. A sufficient number has been already adduced to show, that the apparently extravagant supposition with which I set out may be paralleled in the insect world; and that the metamorphoses of its inhabitants are scarcely less astonishing than would be the transformation of a serpent into an eagle.

The striking analogy between the transformation of the caterpillar into the butterfly, and the earthly and heavenly state of man, was familiar to the ancients, the same word in Greek being used for the human soul and a butterfly. Swammerdam expresses his idea of this coincidence in the following strong terms—“This process (of transformation) is formed in so remarkable a manner, that we see therein the resurrection painted before our eyes, and exemplified

so as to be examined by our hands." The beautiful little Poem, "The Butterfly's Birth-day," will occur to every reader.—*Kirby and Spence*, v. 1, p. 76.

^B " *The instinct of insects—the reason of man.*"

Instinct, which is far more wonderful and complicated in insects than in larger animals, has never yet been justly defined either by Naturalists or Metaphysicians, and can only be called an unknown faculty implanted in them by their Creator, by which they are impelled to certain actions, generally invariably the same, and yet when circumstances direct a deviation, so adapted as to give a semblance of reason in the actor. Such is the activity and good sense of the Bees, in building walls of wax and propolis at the door of their hives, when attacked by the night thieves, the Hawk Moths,—and leaving one or two small openings to admit their own workers. And a still more striking instance is the following fact from Huber. "He placed in front of a comb which the bees were constructing, a slip of glass. They were immediately aware that they could not attach their comb to so slippery a surface, and therefore *bent it at a right angle*, and fixed it to a part of the woodwork beyond the glass; but this threw the symmetry of the comb all wrong. The resources of their instinct were, however, adequate to the emergency. They made the cells on the con-

vex of the bent part of the comb much *larger*, and those on the *concave* side much *smaller* than usual. But this was not all. As the bottoms of the small and large cells were, as usual common to both, the cells were not regular prisms, but the small ones considerably wider at the bottom than at the top; and conversely in the large ones! What conception can we form of so wonderful a flexibility of instinct?"—*Kirby and Spence, vol. 2, p. 495, 2nd edition.*

Another instance of the instinct of insects, adapting itself to circumstances, which is the province of *reason*, is the following;—"The *Apis terrestris*, a bee that lives in the earth, when molested with numbers of small mites, which feed upon it, will go and stand upon an ant-hill, when it kicks and scratches and makes a disturbance, to provoke the ants to come out, which they soon do, and falling upon the mites, destroy or carry them all off, and the bee, delivered from its tormentors, flies away."—*Kirby and Spence, vol. 2, p. 268.*

The caterpillar of the cabbage butterfly, when it is about to prepare its habitation for its chrysalis state, commonly fixes it under the coping or projection of a wall; but as the slender thread which serves for its girth, a thread that passes round its body, would not adhere to brick or stone, it first covers a space of the wall with a web of silk, and to this broad base fastens its girth. If fed in a box covered with muslin,

it soon perceives that the muslin will answer the purpose of fixing its thread, and agreeably to this *reasoning*, spins no preparatory web.

Huber observed a bee soldering the angles of a cell with propolis; she cut off a thread of this material, measured it by the angle, found it too long, and cut off a portion to make it exactly suit her purpose.

Dr. Darwin observed a wasp on the gravel walk in his garden, with a fly nearly as large as itself. He distinctly saw it cut off the head and tail, and then taking up the trunk with its feet, fly away. But a breeze blowing the wings of the fly which remained on the trunk, whirled round the wasp, which, finding it could not get on with this impediment, alighted on the walk, and having deliberately sawed off first one wing and then the other, easily flew off with its prey. Was not this *reasoning*?

A party of *burying beetles*, which bury dead bodies in the earth for food, finding a dead toad fixed to dry by a Naturalist, on the top of a stick, and being unable to reach it, undermined the base of the stick till it fell, and then buried both toad and stick.

^c “*You invented the life-boat to float on the wave,*” &c.

The eggs of this insect (the common gnat) of a long phial-like form, are glued together, side by side, to the number of from 250 to 300, into an oblong mass,

pointed and more elevated at each end, so as considerably to resemble a little boat in shape. You must not here suppose that I use the term *boat* by way of illustration merely; for it has all the essential properties of a boat. In shape it pretty accurately resembles a London wherry, being sharp and higher, to use a nautical phrase, fore and aft; convex below and concave above; floating, moreover, constantly on the keel or convex part. But this is not all. It is besides a *life-boat*, more buoyant than even Mr. Greathead's: the most violent agitation of the water cannot sink it; and what is more extraordinary, and a property still a desideratum in our life-boats, though hollow it never becomes filled with water, even though exposed to the torrents that often accompany a thunder-storm. To put this to the test, I yesterday (July 25, 1811), placed half a dozen of these boats upon the surface of a tumbler half full of water; I then poured upon them a stream of that element from the mouth of a quart bottle held a foot above them. Yet after this treatment, which was so rough as actually to project one out of the glass, I found them floating as before upon their bottoms, and not a drop of water within their cavity.—*Kirby and Spence.*

^D “*Have used air-balloons ever since the creation,*” &c.

That the spider can balance itself downwards upon its line, every one knows; but that it can shoot itself

upwards and sail in the air, high above the highest steeple of York Minster seems incredible—yet it is a fact. These air-balloon spiders, which can move in the air faster than the air itself, when they are inclined to take an aerial excursion, first extend their thighs, shanks, and feet into a right line; and then elevating the abdomen till it becomes vertical, shoot a thread up into the air, and dart upwards upon it.—But as insects (more wise than man,) never act without a reasonable motive, the object of these expeditions is, probably, to catch in their flying nets, the gnats and small flies that float in the air.—*Kirby and Spence*, v. 2. p. 339, &c.

The fact of spiders traversing the air was no secret to the ancients, as the epithet of *air-flying* is applied to these insects by Hesiod.—A few more facts will shew the wonderful abilities of this insect; and we shall have no small satisfaction, if the reader, beholding in the spider, no longer a cruel and rapacious destroyer, but contemplating him in his real character, as an admirable geometrician—a most ingenious contriver—a patient hunter of his-appointed food, and a friend of man, in destroying noxious insects, shall change his disgust into admiration, and his antipathy into affection.

“How would the world crowd,” says Kirby, “to see a fox which should spin ropes, weave them into an accurately meshed net, and extend this net be-

tween two trees, for the purpose of entangling a flight of birds!" Yet there is nothing in this more wonderful than the contrivances of the spider.—The thread spun by the *weavers* (all spiders do not spin webs,) is similar to that of the silkworm and other caterpillars, but much finer. In them it proceeds from reservoirs, and is spun from the mouth; but in the spider it is spun from the hinder part of the abdomen, where are placed four small protuberances, or spinners. These are the machinery through which the thread, by a more singular process than that of rope-making, is drawn. This thread is not single but compound; for in each of these spinners are a multitude of tubes, so exquisitely fine, and so numerous, that in a space not larger than the point of a pin may be found a thousand of them. From each of these thousand tubes (which consist of two pieces, the last terminating in a point infinitely fine,) proceeds a thread of inconceivable tenuity, making one thousand threads, which immediately unite into one, and form the thread we are accustomed to see the spider use in making her web; and as it proceeds from four spinners, this thread is composed of four thousand threads.

Leeuwenhock calculated, that the threads of the minutest spiders, some of which are not bigger than a grain of sand, are so fine, that it would take *four millions* of them to make a thread as thick as a hair. It follows that *sixteen thousand millions* of spiders'

threads are not together thicker than a hair.—This is an instance of tenuity beyond the power of imagination to conceive. The idea may fairly confound the faculties of man, and make him recollect that when he crushes a spider he destroys one of the most striking specimens of Infinite power and wisdom.

The spider spins with her feet, two of which are provided underneath with claws having teeth like a comb, to keep the threads asunder ; but as, in ascending her line when she has dropped from an eminence, she winds up the line into a ball, the comb claws could not perform this, so her provident Creator has given her another claw for this purpose, placed between the other two.

Thus bountifully provided with implements of industry, the spider exhibits, in an astonishing degree, the virtues of patience and perseverance in toiling for her maintenance. The weaver, viz. the spider that is found in houses, weaves what may justly be called *webs*. Having found a convenient corner, she glues one end of her thread to it ; then walking along the wall, she fastens the other end to the opposite side. This thread, which is to form the selvage of the web, she doubles and quadruples ; then draws other threads from it, which she fills up, till the web becomes that gauze-like texture which we see. When the weavers spread their nets in out-houses or among bushes, they carry up from them a number of threads, crossing

each other like the tackling of a ship, to entangle the flies.—*Kirby and Spence.*

^E “*The architect Ant noble cities outlaid,*” &c.

The nest of *Formica brunnea*, is composed wholly of earth, and consists of about forty stories, twenty above and twenty below the surface of the soil. Each story contains saloons, smaller apartments, and long galleries of communication between. The arched roofs of the most spacious apartments are supported by thin walls, or, occasionally, by small pillars or buttresses. The main galleries, several of which sometimes meet in one large saloon, communicate with other subterranean passages, which often run several feet from the ant-hill. These little masons, who work chiefly after sun-set, employ *soft* clay only, which they scrape from the bottom of the nest, when it is sufficiently moistened by a shower, and this, far from injuring, strengthens and consolidates their architecture. This they convey in small masses between their mandibles or jaws, and with the same instruments spread and mould it to their will, the antennæ or feelers accompanying; to make all firm they press the surface lightly with their fore feet: and though they use no glutinous material, these numerous

masses of soft clay appear, when finished, one single layer consolidated. Having traced the plan of their structure by placing here and there the foundations of the pillars and partition walls, they add new portions; and when the walls of a gallery or apartment, which are half a line thick, are elevated about half an inch high, they join them by springing a flattish arch or roof from one side to the other. Nothing can be a more interesting spectacle than one of these cities while building. In one place, vertical walls form the outline, communicating, by openings in the masonry, with different corridors: in another we see a true saloon, whose vaults are supported by numerous pillars; and farther on are the cross ways or squares where several streets meet: the roofs of these squares, though often more than two inches across, the ants find no difficulty in constructing. They begin the sides of the arch in the angle formed by two walls, and extend them by successive layers of clay till they meet; while crowds of masons arrive from all parts with their particles of mortar, working with a regularity, harmony, and activity, which can never be enough admired. So assiduous are they all in their operations, that they will complete a story with all its saloons, vaulted roof, partitions, and galleries, in seven or eight hours. If they begin a story, and for want of moisture to soften the clay, are unable to finish it,

they pull down all the crumbling apartments that are not covered in.—Another species of masons, viz. *Formica fusca*, when they wish to add another story to their habitation, cover the top with a thick layer of clay, and then scoop out the apartments, like grottos, heightening and covering them in. M. Huber saw a single ant make and cover a gallery two or three inches long, without assistance.

Another society of ants, *Formica faliginosa*, build their cities in the trunks of old oaks or willows, gnawing the wood into numberless stories, sometimes supported by vertical partitions, forming numberless apartments, communicating by small apertures, and sometimes by small light pillars, with a base and capital, arranged in colonnades. Other tribes of carpenter ants use saw-dust, some for building walls and stopping up chinks; and some for whole stories, making it into a sort of *papier mâché*, with earth and spider's web.—Huber, *Recherches sur les Mœurs des Fourmis*.

This astonishing display of Almighty skill, in compressing within the minute form of this insect such wonderful prudence of mind and activity of body, may well shame the vast intellect and giant strength of man, and make him receive with humility the Scripture admonition,—“Go to the ant, thou sluggard, consider her ways, and be wise.”

F “ *Our weaver, the silk-worm, e’er since the beginning,*” &c.

“ Of the *larvæ* which inclose themselves in *silk*, the most familiarly known is the silk-worm: the cocoon of this consists exteriorly of a thin, transparent, gauze-like coating, through the interstices of which can be seen an inner, smaller, oval ball, of a more close and compact nature. The whole is, in fact, composed of one single thread, but arranged in two distinct modes. To form the *exterior* envelope, which is merely the scaffolding by means of which the inner and more solid covering is constructed, the caterpillar, after fixing upon a space between two leaves, or twigs, or angles suitable for its purpose, begins by glueing one end of its thread to one of the adjoining surfaces. This thread it next conducts to another part and then fastens, repeating this process and interlacing it in various directions, until it has surrounded itself with a slight and loosely spun netting. In the centre of this, when contracted into a space sufficiently small, it lays the foundation of the interior cocoon. Fixing itself by its prolegs to some of the surrounding threads it bends its body, and by successive motions of its head from side to side, spins a layer of silk on the side opposite to it: when this is of the requisite thickness, the larva shifts its position, and repeats the same process in another quarter, covering each layer in turn with a new one until the interior cavity is reduced to

the size desired. Thus, the silken thread which forms this new cocoon is not, as might have been supposed, wound circularly as we wind the thread of a ball of cotton; but backwards and forwards in a series of zigzags, so as to compose a number of distinct layers. Malpighi could distinguish six of these layers, and Reaumur suspects there is often a greater number. The former found the length of the thread of silk composing them when wound off, without including the exterior case, to be not less than 930 feet; but others have computed it at more than a thousand; consequently the threads of five cocoons united would be a mile in length. Estimating by the weight, the thread of a pound of cocoons, each of which weighs about two grains and a half, would extend more than 600 miles, and such is its tenuity, that the threads of five or six cocoons require to be joined to form one of the thickness requisite in the silk manufacture. It is the continuous thread of the inner cocoon which is most valuable: the outer loose coating from its irregularity cannot be wound off, and is known in commerce by the name of *floss silk*.

“ The mode of producing and manufacturing silk was not known in Europe till long after the Christian æra, being first learned about the year 550, by two Monks who procured in India the eggs of the silkworm moth, and conveyed them, concealed in hollow canes, to Constantinople, whence they were

introduced into Italy. Silk was not cultivated in France till the time of Henry 4th, and in our own island it was so scarce in the time of James 1st, that that monarch, when King of Scotland, borrowed of the Earl of Mar a pair of silk stockings, to appear in before the English Ambassador, enforcing his request with this cogent appeal—"for ye would not, sure, that your king should appear as a scrub before strangers." Nay, long before this period, even prior to the time that silk was valued at its weight of gold at Rome, and the Emperor Aurelian refused his Empress a robe of silk because of its dearness—the Chinese peasantry in some of the provinces, millions in number, were clothed with this material; and for some thousand years to the present time, it has been both there and in India, (where a class whose occupation was to attend silkworms appears to have existed from time immemorial, being mentioned in the oldest Sanscrit books,) one of the chief objects of cultivation and manufacture."—*Kirby and Spence, vol. 1, page 334.*

"The organization in the abdomen of the silkworm or spider, whereby these insects form their thread, is as incontestably mechanical as a wire-drawer's mill. In the body of the silkworm are two bags, remarkable for their form, position, and use. They wind round the intestine; when drawn out they are ten inches in length, though the animal itself be

only two. Within these bags, is collected a glue; and communicating with the bags, are two paps or outlets, perforated, like a grater, by a number of small holes. The glue or gum, being passed through these minute apertures, forms hairs of almost imperceptible fineness; and these hairs, when joined, compose the silk which we wind off from the cone, in which the silkworm has wrapped itself up; in the spider the web is formed from this thread. In both cases, the extremity of the thread by means of its adhesive quality, is first attached by the animal to some external hold; and the end being now fastened to a point, the insect, by turning round its body, or by receding from that point, draws out the thread through the holes above described, by an operation, as hath been observed, exactly similar to the drawing of wire. The thread, like the wire, is formed by the hole through which it passes. In one respect there is a difference. The wire is the metal unaltered, except in figure. In the animal process, the nature of the substance is somewhat changed, as well as the form: for, as it exists within the insect, it is a soft, clammy gum, or glue. The thread acquires, it is probable, its firmness and tenacity from the action of the air upon its surface, in the moment of exposure; and a thread so fine is almost all surface. This property however, of the paste, is part of the contrivance."—*Paley's Natural Theology*.

G " *You imitate man in a certain base trade.*"

Before we give our readers the wonderful account of the slave-trade carried on by the *ants*, (a relation that might seem to degrade this our convocation of Insects to a level with the annals of fairyism,) we must mention those naturalists who have vouched for its truth—viz. Kirby and Spence, Huber, and Latreille. Under the shadow of these great names, we fearlessly proceed to our extraordinary story.

The red ants, which are never found in England, (a hint that no slave-dealers ought to breathe our *free* air) are accustomed to make war upon the cities of the black ants, for the purpose of procuring slaves to perform all the business of the society. They do not steal the adults, but carry off the helpless infants, i. e. the larvæ and pupæ; and these they educate in their own nests till they are able to work.

There are two species of ants (viz. *Formica rufescens* and *Formica sanguinea*,) remarkably expert in the art of making war, and procuring slaves. They generally sally forth upon their expeditions in the afternoon, and previously to marching, they send out scouts to explore the neighbourhood. Upon their return, the body of warriors, issuing from their subterranean city, direct their route to the quarter whence the scouts came. They have various preparatory signals, such as pushing each other with the mandibles

or forehead, or touching each other's antennæ, or feelers, to excite their martial ardour, give the marching signal, or indicate the route they are to take. They have an advanced guard of eight or ten ants, who, as soon as they get beyond the rest, move back, wheel round in a semi-circle, and mix with the main while others succeed to their station. They have, as the great Hebrew Naturalist observes, "*no captain, overseer, or ruler,*" but all, in turns, take place at the head of the army; probably for the purpose of communicating intelligence more readily. Thus marching through the grass, when they have proceeded about thirty feet from their own city, they disperse, and like dogs with their noses, explore the ground with their antennæ to discover traces of their game. The city of the black ants is soon discovered and attacked: the negroes who are usually keeping guard at their avenues, dart furiously upon the foremost of the assailants; the alarm is given, and crowds of negroes rush from all the apartments. The besiegers fall upon them and compel them to retreat to their lowest story; great numbers enter with them at the gates; others, with their mandibles, make breaches in the walls, through which the whole victorious army marches into the beseiged city. Each soldier seizes an infant negro, *i. e.* a pupa or larva, carries it off in its mouth, and by the same passages through which they had entered, the victors, with their prizes, evacu-

ate the city, and by the same route regain their own dominions. We will conclude this account with a relation of a slave expedition, witnessed by Mr. Kirby and M. Latreille, in the Bois de Boulogne near Paris, on the 25th of June, about 1817 or 1818, in the words of the former without abridgement.

“The day was excessively hot and sultry : a little before five in the afternoon we began our search. At first we could not discern a single ant in motion. In a minute or two, however, my friend directed my attention to one individual. Two or three more next appeared : and soon a numerous army was to be seen winding through the long grass of a low ridge, in which was their formicary. Just on the entrance of the wood from Paris, on the right hand and near the road, is a bare place paved in for the Sunday amusement of the lower orders : to this the ants directed their march ; and upon entering it, divided into two columns, which traversed it rapidly and with apparent eagerness ; all the while exploring the ground with their antennæ as beagles with their noses, evidently in pursuit of game. Those in the van, as Huber also observed, kept perpetually falling back into the main body. When they had passed this inclosure, they appeared for some time to be at a loss, making no progress but only coursing about ; but after a few minutes delay, as if they had received some intelligence, they resumed their march and soon ar-

rived at a negro nest, which they entered by one or two apertures. We could not observe that any negroes were expecting the attack on the outside of the nest, but in a short time a few came out at another opening and appeared to be making their escape. Perhaps some conflict might have taken place within the nest in the interval between the appearance of these negroes and the entry of the assailants. However this might be, in a few minutes one of the latter made its appearance with a pupa in its mouth: it was followed by three or four more; and soon the whole army began to emerge as fast as it could, almost every individual carrying its burden. Most that I observed seemed to have pupæ. I then traced the expedition back to the spot from which I saw them set out, which, according to my steps, was about 156 feet from the negro formicary. The whole business was transacted in little more than an hour."

H " *We have lances and darts of a temper so fine.*"

The stings of insects, though for a different purpose, are, in their structure, not unlike the piercer. The sharpness to which the point in all of them is wrought; the temper and firmness of the substance of which it is composed: the strength of the muscles by

which it is darted out, compared with the smallness and weakness of the insect, and with the soft and friable texture of the rest of the body; are properties of the sting to be noticed, and not a little to be admired. The sting of a bee will pierce through a goat-skin glove. It penetrates the human flesh more readily than the finest point of a needle. The action of the sting affords an example of the union of chemistry and mechanism, such as, if it be not a proof of contrivance, nothing is. First, as to the chemistry; how highly concentrated must be the *venom*, which, in so small a quantity, can produce such powerful effects! And in the bee we may observe, that this venom is made from *honey*, the only food of the insect, but the last material from which I should have expected, that an exalted poison could, by any process or digestion whatsoever, have been prepared. In the next place, with respect to the mechanism, the sting is not a simple, but a compound instrument. The visible sting, though drawn to a point exquisitely sharp, is in strictness only a sheath; for near to the extremity, may be perceived by the microscope two minute orifices, from which orifices, in the act of stinging, and, as it should seem, after the point of the main sting has buried itself in the flesh, are launched out two subtile rays, which may be called the true or proper stings, as being those, through which the poison is infused into the puncture already made by

the exterior sting. I have said that chemistry and mechanism are here united: by which observation I meant, that all this machinery would have been useless, *telum imbellè*, if a supply of poison, intense in quality, in proportion to the smallness of the drop, had not been furnished to it by the chemical elaboration which was carried on in the insect's body; and that on the other hand, the poison, the result of this process, could not have attained its effect, or reached its enemy, if, when it was collected at the extremity of the abdomen, it had not found there a machinery, fitted to conduct it to the external situations in which it was to operate, viz. an awl to bore a hole; and a syringe to inject the fluid. Yet these attributes, though combined in their action, are independent in their origin. The venom does not breed the sting; nor does the sting concoct the venom."—*Paley's Natural Theology*.

¹ "I shall make, for our army, an excellent scout," &c.

In two of the genera of the dragon fly, the wings, even when these insects are at rest, are always expanded, so that they can take flight in an instant. They can fly without turning, backwards as well as forwards, and in all directions. Such is the power of their long wings, and the strength of the muscles that move them, that they are never weary of flying.

3 “*Should we suffer for science, to lead you to find,*” &c.

If science, which may be simply defined, the knowledge of the works of God, does not lead the human mind to the exercise of those highest intellectual feelings, awe of his power—admiration of his wisdom—and grateful love of his goodness, it can never benefit mankind, but must fatally mislead them. In the pursuit of it, if any act of unkindness and cruelty be committed, against the smallest of those creatures which that omnipotent and incomprehensible Power who calls worlds into existence, has condescended to endow with capacities for happiness—such an offence against his parental benevolence converts the acquisition of knowledge into a crime: and man traces, examines, and discovers the infinite *skill* and *might* of the Creator, by insulting his most glorious attribute, his *goodness*.—I cannot forbear, as not irrelevant to this subject, quoting the opinion of our great English moralist, Dr. Johnson, upon the cruelties practised by unfeeling medical professors.—

“The *Idlers*, that sport only with *inanimate nature*, may claim some indulgence; but there are others whom I know not how to mention without more emotion than my love of quiet willingly admits.—Among the inferior professors of medical science is a race of wretches, whose lives are only varied by varieties of cruelty; whose favorite amusement is to nail

dogs to tables and open them alive, to try how long life may be continued in various degrees of mutilation, or with the excision or laceration of the vital parts; to examine whether burning irons are felt more acutely by the bone or tendon; and whether the more lasting agonies are produced by poison forced into the mouth or injected into the veins.

“ If such cruelties were not practised, it were to be desired that they should not be conceived; but since they are published every day with ostentation, let me be allowed once to mention them, since I mention them with abhorrence.—The anatomical novice tears out the living bowels of an animal and styles himself physician—prepares himself by familiar cruelty for that profession which he is to exercise upon feeble bodies and broken minds, and by which he has opportunities to extend his arts of torture, and continue those experiments upon infancy and age which he has hitherto tried upon cats and dogs. What is alleged in defence of these hateful practices every one knows; but the truth is, that by knives, fire, and poison, knowledge is not always sought, and is very seldom attained. The experiments that have been tried are tried again—he that burned an animal with irons yesterday, will be willing to amuse himself with burning another to-morrow. I know not, that by *living dissections* any discovery has been made by which a malady is more easily

cured. And if the knowledge of physiology has been somewhat increased, he surely buys knowledge dear, who learns the use of the lacteals at the expence of his humanity. It is time that universal resentment should rise against these horrid operations, which tend to harden the heart, extinguish those sensations which give man confidence in man, and tend to make the physician more dreadful than the gout or stone."—*Idler*, No. 17, 1758.

K " *And the curl of a leaf is our shelter and home.*"

We little imagine, when tempted to crush with our fingers the grubs on our rose-trees, what wonderful dexterity and labor the poor insect has displayed in forming his fairy house. Those tineæ, which feed on the leaves of the rose tree, apple, elm, and oak, on the under side of which, in summer, they may often be found, form a long cavity in the interior of the leaf, by eating away the inside, and having detached the upper and under side, they join them with silk so artfully that the seams are scarcely discernible, even with glasses. Thus they maké a hollow case, round at the top and triangular at the bottom. The different shape of the two ends, renders it necessary that each should have a different curvature; and Reaumur affirms that these are as difficult to fit as the shapings of the back of a coat. Kirby observed some of this

tribe upon the alders in the Hull Botanic Garden, who are still more ingenious than their brethren. To save the labour of sewing up two seams in their dwelling, they insinuate themselves into a leaf near the edge instead of the middle. Here they form their excavation between the two surfaces of the leaf, which they leave joined at the edge, and forming one seam of the case; the opposite side they are necessarily forced to cut and sew up, but even in this operation they shew an ingenuity and contrivance worthy of admiration. Those tineæ which cut out their case from the middle of the leaf, wholly detach the two surfaces that compose it before they proceed to join them together, the serrated incisions made by their teeth, (which, if they do not cut as fast, are more effective than any scissors) interlacing each other, so as to support the separated portions till they are properly joined. But, if those Tineæ who cut out their house from the *edge* of the leaf were to detach the inner side before they had joined the two pieces together, the builder as well as his dwelling would inevitably fall. They, therefore, before making any incision, prudently *run* (as a sempstress would call it) loosely together, in distant points, the two membranes on that side. Then, putting out their heads, they cut the intermediate portions, carefully avoiding the larger nerves of the leaf, and sew up the detached sides more closely.

ROMAN

AND

ENGLISH PASTIMES.

LOVER of Taste!—whose musing footsteps
tread

That CITY's dust, which *is not*—but *has been*;
And, the world's diadem around her head,

Once, from her throne, exclaim'd—“ *I sit a
Queen :*”

Hast thou not, rapt in visions of the past,

Call'd up the pageants of her glorious time ;
And, in her mighty COLISEUM's waste,

Felt magic musings, solemn, sad, sublime ?

And stretch'd upon the grassy floor, alone,
In evening's gloom, while perhaps the moon-
beams bright,

Gilt, shatter'd, here and there a topmost stone,
And every hollow arch below was night ;

Seen, in thy memory's eye phantasmas dread,
People, in shadowy pomp, the ruin'd dome,
And show, in vivid, faithful colors spread,
The sports and pastimes of IMPERIAL
ROME !—

Issuing from subterranean dens beneath,
The slaves lead forth whole troops of beasts
to light ;^a

Bears, tigers, lions, rage and slaughter breathe,
And, tam'd to slay, engage in furious fight.

Next, human ghosts advance—a bleeding band !
Devoted *slaves*,—prepared by studious skill,
To feast the great and vulgar of the land,
With finest practice of the art *to kill*.

Intrepid victims !—Stoics by constraint !—^B
That hand, which wrought your spirit out
of stone,

Till time's no more, to pity's eye shall paint
The DYING GLADIATOR's stifled groan!—

And, where the vast arcades, in triple tier,
Rival Rome's seven fam'd hills, in haughty
height—

From *slave to emperor*, see a nation here !^c
The charm'd spectators of the ghastly sight !

While splendid awnings shade the burning ray,
And show'rs of fragrance cool the panting
breath,

To give luxurious relish to the *play*
Of *strife* and *blood*, of *agony* and *death* !—

He that has mus'd all this, with honest rage
Has thus exclaim'd—“ O Rome ! imperial
Queen !

Could'st thou—wise, learn'd, the glory of thy age,
Enjoy and revel in the savage scene?

Thou could'st—for not to *thee* was then pro-
claim'd,

By Heralds from on high, 'good-will to man ;'
Thy bold and rugged nature was not tam'd
By the soft mercies of the Gospel plan.—

Thy faith was folly, and thy rites were shame,
Thy Gods were men, less worthy far than
brutes ;

Some pity then thy savage soul may claim,
For such religion well such custom suits."

Thus Rome is pardon'd—but, my Country !
say—

Who can for *thee*, one faint excuse avow ?
Thy heathen pastimes make a night of day,
And Christian Britain is the *Pagan* now !

BRITAIN, the blest of heav'n ! o'er whose rich
state

The civil arts their countless blessings show'r;
In moral science, greatest of the great—

Renown'd for wisdom, elegance, and pow'r :

In pure Religion grac'd above the rest,
With Truth's full knowledge like a cloudless
day ;

With hosts of zealous, faithful pastors blest,
Wise, learn'd, and good, to teach SALVA-
TION'S way.

And, in thy love to man, with zeal profound,
(*Grateful*, as might be hop'd, for grace so
high,)

Sending the Heralds of the Gospel round,
To ev'ry distant coast beneath the sky !

While thus *abroad* thou wear'st the shining
robe
Of lovely Charity and Faith divine,

As 'twere thy joy to humanize the Globe—

Behold! *at home*, what brutal crimes are
thine!—

See thy green vales by savage sports disgrac'd,

Which e'en the Hottentot would blush to own!

Man mangling man!—life on a wager plac'd!—

A spectacle for demons' eyes alone!—

Infatuate land!—from thee the gentle grace

Of soft Humanity, alarm'd, departs:—

Blind in the mid-day SUN!—'mid GLORY *base*!

And *brutified* amid the tasteful ARTS!—

Nor this enough—but must thou, too, engage

The nobler, wiser brutes to learn of thee

To rend each other with excited rage,

That crowds may gaze and shout with maniac
glee!

And having tam'd the monarch of the wood,^d

Caress'd and fed—and in his gen'rous heart

Rais'd kind attachment—then to drink his
blood !—

Feast on his tortures !—'tis a traitor's part !

Thrill'd not thy breast with one sharp pang within,
When with superior virtue, kind as brave,
The noble-minded beast rebuked thy sin,
And those, by thee devoted, sought to save ?

Oh Britain !—rouse thee, lest this dread abuse
Of light and mercy, benefits and love,
Provoke ETERNAL JUSTICE to let loose
Some fearful visitation from above !

Call on thy Senate ! wake thy slumb'ring laws !
Redeem thy name ! and show thou still can'st
feel !

Protect the race of brutes, support their cause !—
A cause well worthy of the Patriot's zeal.

Tho' bold the Muse—ye gen'rous and humane,
Misjudge not upright sympathy as wrong ;—

For humble tho' it be, this honest strain
But gives *a voice* to those who have *no tongue*.

The noble Horse, his life of service past,
In travel, labor, or in battle brave,
Left in the Nagger's^E den to die at last,
Petitions *British gratitude—to save!*—

The patient Ox—the Sheep—(blest gifts of
heav'n !)

As bleeding in the mart, they gasp for breath,
Their lives for man's support and comfort giv'n,
Beseech that boon of justice, *easy death*.—

^F The noble Cock—his race, a general good
To all mankind, in ev'ry age and clime,
Asks why *his* courage rous'd to deeds of blood,
Must slay his *fellows*?—harden *man* in
crime?—

The gentle Pigeon, trembling, seems to ask
Why reasoning beings of the human race,

With *keen delight* pursue the rival task,
To crowd *most deaths*, within a *given space*.

Oh! hear their voice!—unite to grant their pray'r,
Ye wise!—ye good!—ye pow'rful!—and ye
great!

Love you your *country*?—is her weal your care?
Then *save* her **MORALS**—and you save her
STATE.

Arise! brave Britain!—not the world in arms
Can shake thine hand, or cause thine heart
to quail;—

But there's a *foe*, tho' view'd without alarms,
Of mightier danger walks thy own green vale.

Then rouse thy valour for a nobler fight!—
Unsheath thy conqu'ring sword of richest
price,
Temper'd and tried—and with true English might,
Point the sure weapon at **DOMESTIC VICE**!

NOTES TO "ROMAN AND ENGLISH PASTIMES."

A " *The slaves lead forth whole troops of beasts to light.*"

Titus Vespasian, who treated his people with one of these splendid festivals of death, in one day exhibited, in combat, 5,000 *wild beasts* of various kinds.—*Pinarolo, Antichita di Roma. vol. 1, p. 109.*

Julius Cæsar, in his Edileship, amused the people with 320 pair of Gladiators: and Trajan, in a show that lasted 123 days, brought out 1,000 pair.

These horrible games, which arose from the ancient custom of immolating human victims at funeral rites, and were first given at Rome by Marcus and Decimus Brutus on the death of their father, A. U. C. 490, began to be abolished by Constantine, and

were entirely banished by Theodoric king of the Ostrogoths, A. D. 500.

^B “ *Intrepid victims!—Stoics by constraint!*”

The master of the Gladiators, before they began combat, exacted from them an oath that they would *fight to death*, and if they failed they were put to death either by fire, sword, clubs, or whips. It was a crime to complain if wounded, to ask for death, or to avoid it if conquered. But when they gave no sign of fear, and awaited the fatal stroke with intrepidity, it was usual for the Emperor to grant their life.

The dying Gladiator, that valuable monument of ancient sculpture, was, with the Laocoon, carried to Paris in 1796.

^C “ *From Slave to Emperor, see a nation here.*”

There were in this vast amphitheatre, as the present ruins plainly show, three circles of seats, the highest for the Senators, the middle for the Equites,

and the lowest for the Plebeians. According to Pin-
arolo, these seats would accommodate 85,000 per-
sons.

D “*And having tamed the monarch of the wood.*”

A public exhibition of a fight between a lion named Nero and six dogs, was witnessed by crowds of spectators, in a field near Warwick, July 26, 1825. The following striking circumstance is taken from Bell's Weekly Messenger of that time:—"At the first rush of the dogs, which the lion evidently had not expected, and did not at all know how to meet, they all fixed themselves upon him, but caught only by the dewlap and mane. With a single effort he shook them off, without attempting to return the attack. He then flew from side to side of the cage, endeavouring to get away; but in the next moment the assailants were on him again, and the brown dog, Turk, seized him by the nose, while the two others astened at the same time on the fleshy part of his lips and under jaw. The lion then roared dreadfully, but evidently only from the pain he suffered, not at all from anger. As the dogs hung to his throat and head, he pawed them off by sheer strength; and in

doing this and rolling upon them, did them considerable mischief, but it amounts to a most curious fact, that he never once bit, or attempted to bite, during the whole contest, or seemed to have any desire to retaliate any of the punishment that was inflicted on him.

E “ *Left in the Nagger’s den to die at last.*”

The Naggers (in London) are people who purchase worn-out horses, for the purpose of selling them as dog’s-meat. They are not at the expence of feeding them; and the helpless animals are thus left confined in a close place, till some purchaser applies for food for his dogs, or famine puts an end to their lingering sufferings.

F “ *The noble cock—his race, a general good,*” &c.

“ Man is that link of the chain of universal existence, by which spiritual and corporeal beings are united: as the numbers and variety of the latter his inferiors are almost infinite, so probably are those of

the former his superiors; and as we see that the lives and happiness of those below us are dependent on our wills, we may reasonably conclude that our lives and happiness are equally dependent on the wills of those above us: accountable, like ourselves, for the use of this power, to the Supreme Creator, and Governor of all things. Should this analogy be well founded, how criminal will our account appear when laid before that just and impartial Judge! How will man, that sanguinary tyrant, be able to excuse himself from the charge of those innumerable cruelties inflicted on his unoffending subjects committed to his care, formed for his benefit, and placed under his authority by their common Father? whose mercy is over all his works, and who expects that this authority should be exercised not only with tenderness and mercy, but in conformity to the laws of justice and gratitude.

“What name should we bestow on a superior being, whose whole endeavors were employed, and whose whole pleasure consisted in terrifying, ensnaring, tormenting, and destroying mankind? whose superior faculties were exerted in fomenting animosities amongst them, in contriving engines of destruction, and inciting them to use them in maiming and murdering each other? whose power over them was employed in assisting the rapacious, deceiving the simple, and oppressing the innocent? who, without provocation or advantage, should continue from day to day

void of all pity and remorse, thus to torment mankind for diversion, and at the same time endeavor with their utmost care to preserve their lives, in order to increase the number of victims devoted to his malevolence, and be delighted in proportion to the miseries which he occasioned? I say, what name detestable enough could we find for such a being? Yet, if we impartially consider the case, and our intermediate situation, we must acknowledge that, with regard to inferior animals, just such a being is *a sportsman*."—*Soame Jenyns*.

THE CARRIER-PIGEON'S LAMENTATION.

Several of these birds were despatched from Bishop's Wood, Staffordshire, April 8th, 1828, to various parts of the kingdom, with letters conveying intelligence of the prize-fight between the pugilists Sampson and Brown, for 500 Sovereigns.

FORBEAR!—no more with fatal tale
Of games of blood in Albion's vale,
Pollute my spotless wing!—
The *vulture* or the *harpy* ohuse—
For they, such brutifying news,
Without *disgrace* might bring.

Shall I, who in that awful day,
 When man's whole race was swept away,
 The joyful tidings bore
 To the blest Patriarch on the tide,
 That MERCY bade the flood subside,
 And earth to bloom once more ;—

Shall I be sent from shore to shore,
 Conveying laurels dy'd in gore,
 The wrestler's brows to crown ?—
 While mad with joy the "rabble rout"
 Exulting sounds of victory shout,
 And call *disgrace* renown.

Oh ! hear my moan of shame and grief !—
 And give me back my olive leaf !—
 Or distant let me flee
 To some good land, in gentler skies,
 Whose dwellers, though as *serpents wise*,
 Are *harmless*, meek, like me !—

There, shall I keep my ancient fame,
(Far from the cruel sportsman's aim),*

There, games of death shall cease ;—
And I be still *the faithful Dove*,
Symbol of innocence and love,
And *Messenger of Peace*.

• The Pigeon Shooter.

Finis.







